

## OFFICIAL UNDERGRADUATE COURSE OUTLINE FORM

Note: The University reserves the right to amend course outlines as needed without notice.

<b>Course Code and Number:</b> MATH 053		<b>Number of Credits:</b> 1.5 <a href="#">Course credit policy (105)</a>															
<b>Course Full Title:</b> Fundamental Math II <b>Course Short Title:</b>																	
<b>Faculty:</b> Faculty of Access and Continuing Education		<b>Department (or program if no department):</b> Upgrading and University Preparation															
<b>Calendar Description:</b> The second of four fundamental math levels. Introduces operations on fractions and decimals, and covers estimation, measurement, and problem solving.																	
<b>Prerequisites (or NONE):</b>		UUP Department permission (assessment may be required).															
<b>Corequisites (if applicable, or NONE):</b>		None															
<b>Pre/corequisites (if applicable, or NONE):</b>		None															
<b>Antirequisite Courses</b> <i>(Cannot be taken for additional credit.)</i> Former course code/number: MATH 051 Cross-listed with: Dual-listed with: Equivalent course(s): <i>(If offered in the previous five years, antirequisite course(s) will be included in the calendar description as a note that students with credit for the antirequisite course(s) cannot take this course for further credit.)</i>		<b>Special Topics</b> <i>(Double-click on boxes to select.)</i> This course is offered with different topics: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <i>(If yes, topic will be recorded when offered.)</i>															
<b>Typical Structure of Instructional Hours</b> <table border="1"> <tr> <td>Lecture/seminar hours</td> <td>45</td> </tr> <tr> <td>Tutorials/workshops</td> <td></td> </tr> <tr> <td>Supervised laboratory hours</td> <td></td> </tr> <tr> <td>Experiential (field experience, practicum, internship, etc.)</td> <td></td> </tr> <tr> <td>Supervised online activities</td> <td></td> </tr> <tr> <td>Other contact hours:</td> <td></td> </tr> <tr> <td><b>Total hours</b></td> <td><b>45</b></td> </tr> </table> Labs to be scheduled independent of lecture hours: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes		Lecture/seminar hours	45	Tutorials/workshops		Supervised laboratory hours		Experiential (field experience, practicum, internship, etc.)		Supervised online activities		Other contact hours:		<b>Total hours</b>	<b>45</b>	<b>Independent Study</b> If offered as an Independent Study course, this course may be repeated for further credit: <i>(If yes, topic will be recorded.)</i> <input type="checkbox"/> No <input type="checkbox"/> Yes, repeat(s) <input type="checkbox"/> Yes, no limit	
		Lecture/seminar hours	45														
		Tutorials/workshops															
Supervised laboratory hours																	
Experiential (field experience, practicum, internship, etc.)																	
Supervised online activities																	
Other contact hours:																	
<b>Total hours</b>	<b>45</b>																
<b>Transfer Credit</b> Transfer credit already exists: <i>(See <a href="http://bctransferguide.ca">bctransferguide.ca</a>.)</i> <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Submit outline for (re)articulation: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <i>(If yes, fill in transfer credit form.)</i>																	
<b>Grading System</b> <input checked="" type="checkbox"/> Letter Grades <input type="checkbox"/> Credit/No Credit																	
		<b>Maximum enrolment (for information only):</b> 24 <b>Expected Frequency of Course Offerings:</b> Every semester															
<b>Department / Program Head or Director:</b> Greg St Hilaire		<b>Date approved:</b> March 1, 2019															
<b>Faculty Council approval</b>		<b>Date approved:</b> March 8, 2019															
<b>Dean/Associate VP:</b> Dr. Sue Brigden		<b>Date approved:</b> March 8, 2019															
<b>Campus-Wide Consultation (CWC)</b>		<b>Date of posting:</b> June 21, 2019															
<b>Undergraduate Education Committee (UEC) approval</b>		<b>Date of meeting:</b> September 27, 2019															

**Learning Outcomes:**

Upon successful completion of this course, students will be able to:

**Common Fractions**

1. Define key words such as product, reciprocal, prime and composite.
2. Perform prime factorization of a number.
3. Find the greatest common factor and the least common multiple of a group of numbers.
4. Identify proper and improper fractions, mixed numbers, and equivalent fractions.
5. Simplify common fractions.
6. Write equivalent fractions.
7. Multiply and divide common fractions.
8. Estimate answers to a variety of multiply/divide common fraction problems.

**Decimal Fractions**

1. Read and write decimal fractions to the ten-thousandths place value.
2. Compare decimal fraction values.
3. Round whole numbers and decimal fractions to any given place value.
4. Add, subtract, multiply and divide decimal numbers.
5. Relate common fractions to decimal numbers.
6. Convert between common fractions and decimal fractions.
7. Solve word problems involving decimal fractions, common fractions, or mixed numbers.
8. Estimate answers to a variety of decimal fraction problems.

After completion of MATH 053, students will meet the outcomes as described in the Adult Literacy Fundamental Math Levels 4 and 5 in the 2018 – 2019 Adult Basic Education Articulation Guide available at:

[https://www2.gov.bc.ca/assets/gov/education/post-secondary-education/adult-education/abe\\_guide.pdf](https://www2.gov.bc.ca/assets/gov/education/post-secondary-education/adult-education/abe_guide.pdf)

**Prior Learning Assessment and Recognition (PLAR)**

☐ Yes ☒ No, PLAR cannot be awarded for this course because

**Typical Instructional Methods** (*Guest lecturers, presentations, online instruction, field trips, etc.; may vary at department's discretion.*)

Methods may include mini-lessons, individual assistance, group activities, assignments, demonstrations, group problem solving, math labs, and computer assisted learning.

**NOTE: The following sections may vary by instructor. Please see course syllabus available from the instructor.**

**Typical Text(s) and Resource Materials** (*If more space is required, download Supplemental Texts and Resource Materials form.*)

Author (surname, initials)	Title (article, book, journal, etc.)	Current ed.	Publisher	Year
1. W. Tagami/L. Girard	Adult Fundamental Literacy Math Books 4 and 5	<input checked="" type="checkbox"/>	Creative Commons	2018
2. Baratto and Bergman	Prealgebra	<input checked="" type="checkbox"/>	McGraw Hill Education	2014
3.		<input type="checkbox"/>		
4.		<input type="checkbox"/>		
5.		<input type="checkbox"/>		

**Required Additional Supplies and Materials** (*Software, hardware, tools, specialized clothing, etc.*)

Basic scientific calculator

**Typical Evaluation Methods and Weighting**

Final exam:	40%	Assignments:	%	Field experience:	%	Portfolio:	%
Midterm exam:	%	Project:	%	Practicum:	%	Other:	%
Quizzes/tests:	60%	Lab work:	%	Shop work:	%	Total:	100%

**Details (if necessary):**

3 quizzes and 1 final exam.

**Typical Course Content and Topics**

- Introduction to prime factors and prime factorization
- Fractional operations
- Decimal operations